National Transportation Safety Board

Washington, D.C. 20594

Office of the Chairman

FEB 25 2003

Honorable Norman Y Mineta
Secretary of Transportation
400 Seventh Street, S.W.
Washington, D.C. 20590

Read in
MAR 24 2003
Exec Sec

Dear Secretary Mineta:

This letter regards the Research and Special Programs Administration's (RSPA's) November 25, 2002, response to the National Transportation Safety Board's Safety Recommendations I-02-1 and -2, stated below. These recommendations were issued to the U. S. Department of Transportation (U.S. DOT) as a result of the Safety Board's investigation of an accident involving the release of hazardous materials from a railroad tank car and subsequent fire at Riverside, Michigan, on July 14, 2001.

I-02-01

> Develop, with the assistance of the Environmental Protection Agency and Occupational Safety and Health Administration, safety requirements that apply to the loading and unloading of railroad tank cars, highway cargo tanks, and other bulk containers that address the inspection and maintenance of cargo transfer equipment, emergency shutdown measures, and personal protection requirements.

I-02-02

> Implement, after the adoption of safety requirements developed in response to Safety Recommendation I-02-1, an oversight program to ensure compliance with these requirements.

The Safety Board is very appreciative of RSPA Administrator Ellen Engleman and her staff's concerted efforts in the past few months to address the Board's safety recommendations. We expect that several rulemaking projects currently underway will satisfy a number of the Board's open recommendations once final rules are issued. Safety Recommendations I-02-1 and -2, however, were issued specifically to the U.S. DOT because of the Safety Board's concern that proposed rulemaking under "Applicability of Hazardous Materials Regulations to Loading, Unloading, and Storage," Docket No. RSPA-98-4952 (HM-223) could have a significant adverse effect on the safety of hazardous materials loading and unloading operations. Under the proposed rulemaking, oversight of hazardous materials loading/unloading operations of bulk transportation containers would primarily become the responsibility of the Environmental

Protection Agency and the Occupational Safety and Health Administration. As we noted in our comments to RSPA's notice of proposed rulemaking, the Board is specifically concerned about the lack of expertise that personnel from these agencies have in rail tank car design, cargo tank design, and the operational parameters associated with bulk container loading and unloading. We believe that the proposed rulemaking may result in the elimination of effective federal oversight of hazardous materials loading/unloading operations of bulk transportation containers.

The Safety Board believes that the U.S. DOT should strengthen its oversight rather than transfer the responsibility to agencies outside U.S. DOT's responsibility. The Board encourages the DOT to consider the ramifications of, and reconsider its position on, this proposed rulemaking. Pending consideration of the Board's comments, Safety Recommendations I-02-1 and -2 are classified "Open—Unacceptable Response." For your consideration, we have enclosed a copy of the Board's comments, dated October 29, 2001, to RSPA's notification of proposed rulemaking.

Sincerely,

John Hammerschmidt

John A. Hammerschmidt
Acting Chairman

Enclosure

cc: Honorable Ellen G. Engleman, Administrator
Research and Special Programs Administration

Ms. Nancy DiModica, Safety and Health Team
Office of Transportation Policy Development

National Transportation Safety Board

Washington, D.C. 20594

Office of the Chairman

October 29, 2001

Dockets Management System
U.S. Department of Transportation
Room PL 401
400 Seventh Street, S.W.
Washington, D.C. 20590-0001

Dear Sir or Madam:

The National Transportation Safety Board has reviewed the Research and Special Programs Administration's (RSPA's) notice of proposed rulemaking (NPRM), "Applicability of Hazardous Materials Regulations to Loading, Unloading, and Storage," Docket No. RSPA-98-4952 (HM-223), published at 66 *Federal Register* 32420 on June 14, 2001.

RSPA is proposing in the NPRM that the applicability of the hazardous materials regulations (HMR) to loading and unloading activities be based on a "carrier-controlled" criterion under which transportation would begin when the container/package comes under the control of the carrier and end when the carrier relinquishes control. As stated in the preamble, "the HMR would apply to all carrier activities after the carrier takes possession of the hazardous material from an offeror for purposes of transporting it until the package is delivered to its destination, including loading and unloading activities conducted by carrier personnel."

RSPA further states in the preamble that "consignee unloading is not part of transportation in commerce as we propose to apply that term because it occurs after movement in commerce is completed" and that "loading of a tank car by a shipper and unloading of a tank car by a consignee within a facility would not be subject to the HMR." As RSPA is likely aware, rail carriers are not involved with the loading and unloading of tank cars unless a tank car begins to release its cargo during transit and the cargo must be transferred to another tank car. As for motor carriers, carrier personnel may or may not be involved with the loading and unloading of cargo tanks at shippers' and consignees' facilities, depending upon the hazardous material to be handled and the procedures at the facility. Consequently, the Safety Board is concerned that the HMR would not apply to loading and unloading operations for railroad tank cars, highway cargo tanks, and other bulk containers.

The Safety Board has historically and consistently considered loading and unloading operations, particularly of bulk containers such as railroad tank cars, highway cargo tanks, and intermodal bulk containers, to be transportation-related functions. Title 49 *United States Code* Section 5102 defines "transportation" as "the movement of property and loading, unloading, or storage incidental to movement." The U.S. Department of Transportation (DOT) HMR at 49 *Code of Federal Regulations* (CFR) 107.4 similarly defines transportation "as any movement of property by any mode, and any loading, unloading, or storage incidental thereto."

Accordingly, the Safety Board believes that the DOT has both the statutory mandate and authority to regulate loading and unloading operations. The Safety Board notes that the DOT has exercised its authority to regulate loading and unloading operations in the past with the adoption of such regulatory provisions as 49 CFR 173.30 (loading and unloading of transport vehicles in all modes), 174.67 (tank car unloading), 174.101 – 174.115 (loading explosive materials by rail), and 177.834 (general loading and unloading requirements for highway). Also, the Federal Railroad Administration (FRA) has issued hazardous materials bulletins that explain FRA policy and provide guidance about various regulated activities, including tank car unloading, attendance requirements during the unloading of tank cars, and hazardous materials training. In the Board's view, the DOT has, by these actions, established that loading and unloading operations are properly regulated by the HMR.

The carrier-controlled criterion proposed by RSPA, as it applies to loading and unloading operations for hazardous materials being transferred to (or from) railroad tank cars, highway cargo tanks, and other bulk containers, will have a significant impact on public safety. The Safety Board has investigated more than 15 accidents since 1971 that have involved the loading or unloading of hazardous materials transported in bulk containers and has issued 18 safety recommendations addressing loading and unloading operations to the DOT and its modal administrations. (See enclosures 1 and 2.) Collectively, these accidents have resulted in 18 fatalities; 261 injuries; 6,600 evacuations; and more than $28.5 million in damage. The impact of these accidents upon public safety has been significant and demonstrates the need for effective federal oversight of loading and unloading operations involving bulk transportation containers containing hazardous materials. Further, the Safety Board is currently investigating an accident that occurred on July 14, 2001, at the ATOFINA Chemicals, Inc., plant in Riverview, Michigan. The accident involved the release of methyl mercaptan (a poisonous and flammable gas) and resulted in 3 fatalities; 6 injuries; and the evacuation of nearly 2,000 local residents. The release of the methyl mercaptan was from a tank car being prepared for offloading.

Also, recent statistics obtained through the DOT's Hazardous Materials Information System (HMIS) indicate that from 1995 through July 27, 2001, there were 6,947 incidents related to the unloading of hazardous materials from highway cargo tanks. These statistics also reveal that 16 fatalities and more than 250 injuries were associated with these incidents. During the same time, there were 186 railroad tank car unloading incidents, causing a total of 1 fatality and more than 45 injuries. Under this proposed rule, written incident reports on many of these accidents may not be submitted to RSPA and entered into the HMIS, and the capability to detect accident trends and causes in future loading and unloading accidents would be lost.

In two recent Safety Board investigations that involved unloading operations, the June 4, 1999, Whitehall, Michigan,[1] and November 19, 1998, Louisville, Kentucky,[2] accidents, the Safety Board determined that enhanced safety requirements were needed for loading and

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unloading hazardous materials involved in transport and recommended on June 29, 2000, that RSPA:

> I-00-6
> Within 1 year of the issuance of this safety recommendation, complete rulemaking on Docket HM-223 "Applicability of the Hazardous Materials Regulations to Loading, Unloading and Storage," to establish, for all modes of transportation, safety requirements for loading and unloading hazardous materials.

In addition, as a result of the Clymers, Indiana,[3] accident, the Safety Board reiterated Safety Recommendation I-00-6 on March 5, 2001. In an April 5, 2001, response, RSPA noted that publication of the NPRM was scheduled for mid-2001, but it did not indicate whether the NPRM would address Safety Recommendation I-00-6. In a July 23, 2001, letter to RSPA, the Safety Board stated that it considered the establishment of safety standards and requirements for loading and unloading operations to be an essential part of HM-223. The Safety Board also expressed its concern about RSPA's lack of progress in addressing these issues in HM-223 and noted that the DOT is not providing sufficient direction to ensure that personnel involved in these operations are properly trained and provided with clearly written procedures. Safety Recommendation I-00-6 remains classified "Open—Unacceptable Response."

RSPA's own accident data from the HMIS indicate that loading/unloading accidents significantly affect public safety, and yet the proposed criterion excludes the submission of incident/accident notification reports about loading/unloading accidents and negates the improvements being proposed under the "Hazardous Materials: Revisions to Incident Reporting Requirements and the Hazardous Materials Incident Report Form," Docket No. RSPA-99-5013 (HM-229), rulemaking.

The Safety Board is also concerned that certain proposed standards undermine RSPA's longstanding policy of encouraging uniform national standards for transporting hazardous materials. Under this NPRM, highway cargo tank loading and unloading is covered by the HMR if it is performed by carrier personnel, but the same loading or unloading operation would be exempt from the rules if performed by non-carrier personnel. In other words, application of the HMR to loading/unloading operations would depend solely on the status of the person or persons performing the operation. This would very likely result in different standards being imposed by different agencies (federal, state, or local) for loading/unloading operations performed at a given facility with the same equipment. Further, the proposed NPRM does not explain which standards apply to loading or unloading operations that are jointly completed by carrier and facility personnel.

RSPA notes in the NPRM that the Environmental Protection Agency (EPA), the Occupational Safety and Health Administration (OSHA), and local jurisdictions such as fire

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[3] Hazardous Materials Accident Report—*Rupture of a Railroad Tank Car Containing Hazardous Waste, near Clymers, Indiana, on February 18, 1999.* NTSB/HZM-01/01. National Transportation Safety Board, Washington, D.C., 2001.

departments would oversee loading and unloading operations of tank cars, cargo tanks, and other bulk containers performed by shippers and consignees at shippers' and consignees' facilities. RSPA, however, is silent in the NPRM as to whether it has coordinated with either the EPA or OSHA about accepting these oversight responsibilities and whether RSPA has evaluated either agency to determine if they have the expertise and resources to effectively oversee these transportation-related operations. The Safety Board is specifically concerned about the lack of expertise that personnel from these agencies have in rail tank car design, cargo tank design, and the operational parameters associated with bulk container loading and unloading. The Safety Board is not convinced that, if RSPA relinquishes its regulatory authority over hazardous materials loading/unloading operations, other federal and state agencies will be able to effectively exercise the necessary safety oversight of these very specific areas of transportation.

The statutory mandates for both the EPA and OSHA are quite broad. The EPA's regulatory areas include air and water pollution, toxic waste dumping/cleanup, and pesticides, to name a few. OSHA's regulatory responsibilities include a wide spectrum of workplaces, from office environments to major manufacturing facilities, agricultural activities, and diving operations and cover all aspects of these various workplaces. OSHA does have regulations pertaining to loading and unloading of tank cars and cargo tank trucks transporting flammable liquids, liquefied petroleum gas, and anhydrous ammonia. These regulations include requirements such as the use of level track, display of warning signs, blocking of wheels, attendance by properly trained personnel, separation distances of transfer facilities from other buildings, placement of shutoff valves, and electrical bonding, but do not include specific requirements for written procedures and training that have been the subject of previous Safety Board recommendations. The Safety Board is not aware of any EPA regulations that specifically address the transfer of hazardous materials from tank cars, cargo tanks, and other bulk containers or that focus on the operating procedures or training of personnel involved in loading/unloading operations. Neither agency's regulations require the gathering of data about the failure of bulk container packaging in transportation-related accidents.

Further, OSHA regulations grant individual states the authority to develop and operate their own State Implementation Plans (SIPs) to enforce federal occupational, safety, and health regulations in conjunction with the state's own regulations. Michigan and Kentucky are 2 of the 23 states that have approved SIPs; however, as a result of the Safety Board's investigations of the Whitehall and Louisville accidents, the Safety Board discovered that neither state's OSHA had inspected the loading/unloading operations at either plant. Further, neither state's OSHA had personnel trained in or knowledgeable about the transportation of bulk hazardous materials. The Safety Board is concerned that state OSHAs lack the resources and expertise to provide effective oversight of loading/unloading operations of hazardous material bulk containers.

In summary, the Safety Board believes that the proposed rules may result in the elimination of effective federal oversight of hazardous materials loading/unloading operations of bulk transportation containers. The Safety Board believes that the DOT should strengthen its oversight rather than ignore these issues. Further, the proposed rules will exclude the submission of incident/accident notification reports of loading/unloading accidents to the DOT for placement in the HMIS. Consequently, the Safety Board believes that the HMR should continue to apply to

the loading/unloading of tank cars, cargo tanks, and other bulk containers and therefore strongly urges RSPA to modify this rulemaking accordingly.

The Safety Board is concerned that RSPA also proposes in this NPRM to exempt from the HMR "any matter subject to the postal laws and regulations." RSPA does not provide a reason for this exemption or indicate what precautions are in place or are being implemented to justify this position. The fact that all items transported by the U.S. Postal Service (USPS) will enter the transportation system at some point and will be transported by commercial carriers should be of utmost interest and concern to RSPA.

Problems with undeclared hazardous materials in the mail have been addressed in previous Safety Board investigations, and the Safety Board has issued recommendations to the USPS (A-97-79 and A-00-54)[4] regarding this issue. Further, the Safety Board has investigated several accidents that have involved undeclared hazardous materials that were shipped in U.S. mail.

On October 19, 1993, on a USAir flight scheduled to leave for Rochester, New York, ramp agents found a toilet cleaner containing a 23-percent concentration of hydrochloric acid. They found it after they noticed an unusual odor in the forward cargo compartment. A search revealed a partially destroyed mail sack containing a wet and partially destroyed box that was marked "corrosive." The markings on the box were not visible inside the mailbag, nor did the mailbag have any hazardous materials markings on it. The shipment was sent as an internal postal shipment consigned to the post office in Holcomb, New York. The compartment had to be neutralized and cleaned.

On April 6, 1994, a Continental Airlines plane en route to Houston, Texas, experienced a mercury spill in a shipment of mail. The mailbag contained a box with two bottles of mercury, one of which had split open during transport. The mercury was found beaded on the aluminum floor of the cargo compartment. Mercury is a corrosive material, particularly to aluminum. The shipper said that he was unaware that shipping substances such as mercury by mail was illegal.

Thus, based on its experience with the USPS being used for the transport of hazardous materials, the Safety Board does not believe that any exemption to the HMR should be made for shipments that are subject to postal rules and regulations without first demonstrating that a proactive program within the DOT and/or the USPS is capable of detecting and intercepting all such mail shipments and ensuring that all hazardous materials shipments are properly packaged and identified before they enter the transportation system.

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[4] National Transportation Safety Board, *In-Flight Fire and Impact with Terrain, Valujet Airlines Flight 592, DC-9-32, N904VJ, in the Everglades, near Miami, Florida, on May 11, 1996*, Aviation Accident Report. NTSB/AAR-97/06. National Transportation Safety Board, Washington, D.C., 1997, and National Transportation Safety Board, *Spill of Undeclared Shipment of Hazardous Materials in Cargo Compartment of Aircraft, Northwest Airlines Flight 957, Memphis, Tennessee, on October 28, 1998*, Hazardous Materials Incident Brief. NTSB/HZB-00/ 01. National Transportation Safety Board, Washington, D.C., 2000.

The Safety Board appreciates the opportunity to comment on this proposed rulemaking. If additional clarification or information is needed regarding our comments, feel free to contact us.

Sincerely,

Original signed by:

Marion C. Blakey
Chairman

Enclosures:
(1) List of Loading/Unloading Accident Investigations
(2) List of Safety Recommendations Issued

Enclosure 1

List of Loading/Unloading Accident Investigations

Accident Location	Accident Date	Mode
Berwick, Maine	4/02/1971	Highway
Gadsen, Alabama	8/31/1976	Highway
Baton Rouge, Louisiana	7/30/1983	Railroad
Pascagoula, Mississippi	7/31/1986	Marine
Deer Park, Texas	10/7/1986	Marine
Bay City, Michigan	9/16/1990	Marine
Montgomery County, Maryland	5/12/1993	Highway
Gainesville, Florida	6/17/1994	Highway
Bogalusa, Louisiana	10/23/1995	Railroad
Stock Island, Florida	6/29/1998	Highway
Biloxi, Mississippi	8/9/1998	Highway
Louisville, Kentucky	11/19/1998	Highway
Clymers, Indiana	2/18/1999	Railroad
Whitehall, Michigan	6/4/1999	Highway
Riverview, Michigan [5]	7/14/2001	Railroad

[5] Currently under investigation.

Enclosure 2
Safety Recommendations Issued to the U.S. Department of Transportation and its Modal Administrations

To U.S. Department of Transportation:

H-71-65:

With the participation of the Department of Labor, and if required, the Interstate Commerce Commission, conduct a comprehensive investigation into the risks associated with the delivery of bulk liquid cargoes from motor carrier vehicles, and initiate the implementation of risk-reduction measures.

H-71-69:

Initiate rulemaking action to amend 49 CFR 394 to require all carriers to report accidents occurring in connection with the delivery of bulk liquid materials from motor carrier vehicles, whether or not the carrier's employees, vehicle, or cargo suffered damages in the accident.

I-88-01:

Establish safety requirements for the movement and temporary storage of hazardous materials at intermodal transportation facilities.

I-88-02:

Strengthen minimum safety requirements for loading and unloading of hazardous materials to provide adequate, uniform safety in all modes of transportation.

To the Research and Special Programs Administration:

H-93-34:

Require that the remote control mechanisms for internal shutoff valves be marked for emergency use on all cargo tanks authorized for the transportation of hazardous materials.

H-99-57:

Promulgate regulations requiring motor carriers that transport hazardous materials in cargo tanks to develop and maintain specific written cargo loading and unloading procedures for their drivers.

I-00-06:

Within 1 year of the issuance of this safety recommendation, complete rulemaking on Docket HM-223 "applicability of the hazardous materials regulations to loading, unloading and storage," to establish, for all modes of transportation, safety requirements for loading and unloading hazardous materials.

R-85-70:

Establish safety standards and inspection procedures for loading facilities at petrochemical plants.

To the Federal Railroad Administration:

R-85-68:

Establish a program to inspect rail loading facilities at petrochemical plants on a regular schedule.

R-85-69:

Develop a memorandum of understanding with the Occupational Safety and Health Administration to define the extent of each agency's responsibility for safety inspections of hazardous materials loading/unloading facilities at petrochemical plants to eliminate gaps or overlaps in responsibility.

To the Federal Highway Administration [Federal Motor Carrier Safety Administration]:

H-99-30:

Add elements to training programs for Federal and State inspectors that include instruction on determining whether motor carriers have adequate written procedures for and driver training in loading and unloading cargo tanks.

H-99-31:

Evaluate the adequacy of cargo-tank loading and unloading procedures of and driver training for hazardous-materials motor carriers and require changes as appropriate.

H-99-32:

Issue an "on guard" bulletin to emphasize the danger of splash filling materials into cargo compartments and of switch loading materials having flash points at or above 100° F (National Fire Protection Association Class II and III liquids) into

compartments that last contained materials having flash points below 100° F (National Fire Protection Association Class I liquid).

H-99-59:

Once the federal regulations requiring motor carriers that transport hazardous materials in cargo tanks to provide written cargo loading and unloading procedures are promulgated, ensure that the motor carriers are in compliance with the regulations.

To the U.S. Coast Guard:

M-87-21:

Establish a safety zone around the wharves of the Chevron Refinery in Bayou Casotte, Mississippi, when there are vessels moored at the facility. Examine the conditions at other facilities that transfer hazardous materials and, where risks are evident, establish similar safety zones to exclude unauthorized persons.

M-91-31:

Amend 33 CFR Part 154, Oil Pollution Prevention Regulations for Marine Oil Transfer Facilities, to require that the Facility Operating Manual include procedures for stopping the transfer of product between a vessel and the terminal when a danger of surging exists from passing vessels.

M-91-32:

Direct the captain-of-the-port of Detroit to instruct the officer-in-charge of Coast Guard Station Saginaw River to notify in a timely manner area marine bulk oil/hazardous material terminals in the Bay City/Saginaw Port area within Coast Guard jurisdiction of impending river traffic so that personnel at the terminals and aboard moored vessels can take appropriate measures to suspend the transfer operations, thereby enhancing safety.

M-91-36:

Disseminate the information contained in this accident report to the marine industry by means of Coast Guard publications and notices, emphasizing the requirements of 33 CFR Part 164.

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In addition, as a result of the Clymers, Indiana,[3] accident, the Safety Board reiterated Safety Recommendation I-00-6 on March 5, 2001. In an April 5, 2001, response, RSPA noted that publication of the NPRM was scheduled for mid-2001, but it did not indicate whether the NPRM would address Safety Recommendation I-00-6. In a July 23, 2001, letter to RSPA, the Safety Board stated that it considered the establishment of safety standards and requirements for loading and unloading operations to be an essential part of HM-223. The Safety Board also expressed its concern about RSPA's lack of progress in addressing these issues in HM-223 and noted that the DOT is not providing sufficient direction to ensure that personnel involved in these operations are properly trained and provided with clearly written procedures. Safety Recommendation I-00-6 remains classified "Open—Unacceptable Response."

RSPA's own accident data from the HMIS indicate that loading/unloading accidents significantly affect public safety, and yet the proposed criterion excludes the submission of incident/accident notification reports about loading/unloading accidents and negates the improvements being proposed under the "Hazardous Materials: Revisions to Incident Reporting Requirements and the Hazardous Materials Incident Report Form," Docket No. RSPA-99-5013 (HM-229), rulemaking.

The Safety Board is also concerned that certain proposed standards undermine RSPA's longstanding policy of encouraging uniform national standards for transporting hazardous materials. Under this NPRM, highway cargo tank loading and unloading is covered by the HMR if it is performed by carrier personnel, but the same loading or unloading operation would be exempt from the rules if performed by non-carrier personnel. In other words, application of the HMR to loading/unloading operations would depend solely on the status of the person or persons performing the operation. This would very likely result in different standards being imposed by different agencies (federal, state, or local) for loading/unloading operations performed at a given facility with the same equipment. Further, the proposed NPRM does not explain which standards apply to loading or unloading operations that are jointly completed by carrier and facility personnel.

RSPA notes in the NPRM that the Environmental Protection Agency (EPA), the Occupational Safety and Health Administration (OSHA), and local jurisdictions such as fire

[3] Hazardous Materials Accident Report—*Rupture of a Railroad Tank Car Containing Hazardous Waste, near Clymers, Indiana, on February 18, 1999.* NTSB/HZM-01/01. National Transportation Safety Board, Washington, D.C., 2001.

departments would oversee loading and unloading operations of tank cars, cargo tanks, and other bulk containers performed by shippers and consignees at shippers' and consignees' facilities. RSPA, however, is silent in the NPRM as to whether it has coordinated with either the EPA or OSHA about accepting these oversight responsibilities and whether RSPA has evaluated either agency to determine if they have the expertise and resources to effectively oversee these transportation-related operations. The Safety Board is specifically concerned about the lack of expertise that personnel from these agencies have in rail tank car design, cargo tank design, and the operational parameters associated with bulk container loading and unloading. The Safety Board is not convinced that, if RSPA relinquishes its regulatory authority over hazardous materials loading/unloading operations, other federal and state agencies will be able to effectively exercise the necessary safety oversight of these very specific areas of transportation.

The statutory mandates for both the EPA and OSHA are quite broad. The EPA's regulatory areas include air and water pollution, toxic waste dumping/cleanup, and pesticides, to name a few. OSHA's regulatory responsibilities include a wide spectrum of workplaces, from office environments to major manufacturing facilities, agricultural activities, and diving operations and cover all aspects of these various workplaces. OSHA does have regulations pertaining to loading and unloading of tank cars and cargo tank trucks transporting flammable liquids, liquefied petroleum gas, and anhydrous ammonia. These regulations include requirements such as the use of level track, display of warning signs, blocking of wheels, attendance by properly trained personnel, separation distances of transfer facilities from other buildings, placement of shutoff valves, and electrical bonding, but do not include specific requirements for written procedures and training that have been the subject of previous Safety Board recommendations. The Safety Board is not aware of any EPA regulations that specifically address the transfer of hazardous materials from tank cars, cargo tanks, and other bulk containers or that focus on the operating procedures or training of personnel involved in loading/unloading operations. Neither agency's regulations require the gathering of data about the failure of bulk container packaging in transportation-related accidents.

Further, OSHA regulations grant individual states the authority to develop and operate their own State Implementation Plans (SIPs) to enforce federal occupational, safety, and health regulations in conjunction with the state's own regulations. Michigan and Kentucky are 2 of the 23 states that have approved SIPs; however, as a result of the Safety Board's investigations of the Whitehall and Louisville accidents, the Safety Board discovered that neither state's OSHA had inspected the loading/unloading operations at either plant. Further, neither state's OSHA had personnel trained in or knowledgeable about the transportation of bulk hazardous materials. The Safety Board is concerned that state OSHAs lack the resources and expertise to provide effective oversight of loading/unloading operations of hazardous material bulk containers.

In summary, the Safety Board believes that the proposed rules may result in the elimination of effective federal oversight of hazardous materials loading/unloading operations of bulk transportation containers. The Safety Board believes that the DOT should strengthen its oversight rather than ignore these issues. Further, the proposed rules will exclude the submission of incident/accident notification reports of loading/unloading accidents to the DOT for placement in the HMIS. Consequently, the Safety Board believes that the HMR should continue to apply to

the loading/unloading of tank cars, cargo tanks, and other bulk containers and therefore strongly urges RSPA to modify this rulemaking accordingly.

The Safety Board is concerned that RSPA also proposes in this NPRM to exempt from the HMR "any matter subject to the postal laws and regulations." RSPA does not provide a reason for this exemption or indicate what precautions are in place or are being implemented to justify this position. The fact that all items transported by the U.S. Postal Service (USPS) will enter the transportation system at some point and will be transported by commercial carriers should be of utmost interest and concern to RSPA.

Problems with undeclared hazardous materials in the mail have been addressed in previous Safety Board investigations, and the Safety Board has issued recommendations to the USPS (A-97-79 and A-00-54)[4] regarding this issue. Further, the Safety Board has investigated several accidents that have involved undeclared hazardous materials that were shipped in U.S. mail.

On October 19, 1993, on a USAir flight scheduled to leave for Rochester, New York, ramp agents found a toilet cleaner containing a 23-percent concentration of hydrochloric acid. They found it after they noticed an unusual odor in the forward cargo compartment. A search revealed a partially destroyed mail sack containing a wet and partially destroyed box that was marked "corrosive." The markings on the box were not visible inside the mailbag, nor did the mailbag have any hazardous materials markings on it. The shipment was sent as an internal postal shipment consigned to the post office in Holcomb, New York. The compartment had to be neutralized and cleaned.

On April 6, 1994, a Continental Airlines plane en route to Houston, Texas, experienced a mercury spill in a shipment of mail. The mailbag contained a box with two bottles of mercury, one of which had split open during transport. The mercury was found beaded on the aluminum floor of the cargo compartment. Mercury is a corrosive material, particularly to aluminum. The shipper said that he was unaware that shipping substances such as mercury by mail was illegal.

Thus, based on its experience with the USPS being used for the transport of hazardous materials, the Safety Board does not believe that any exemption to the HMR should be made for shipments that are subject to postal rules and regulations without first demonstrating that a proactive program within the DOT and/or the USPS is capable of detecting and intercepting all such mail shipments and ensuring that all hazardous materials shipments are properly packaged and identified before they enter the transportation system.

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[4] National Transportation Safety Board, *In-Flight Fire and Impact with Terrain, Valujet Airlines Flight 592, DC-9-32, N904VJ, in the Everglades, near Miami, Florida, on May 11, 1996*, Aviation Accident Report. NTSB/AAR-97/06. National Transportation Safety Board, Washington, D.C., 1997, and National Transportation Safety Board, *Spill of Undeclared Shipment of Hazardous Materials in Cargo Compartment of Aircraft, Northwest Airlines Flight 957, Memphis, Tennessee, on October 28, 1998*, Hazardous Materials Incident Brief. NTSB/HZB-00/ 01. National Transportation Safety Board, Washington, D.C., 2000.

The Safety Board appreciates the opportunity to comment on this proposed rulemaking. If additional clarification or information is needed regarding our comments, feel free to contact us.

Sincerely,

Original signed by:

Marion C. Blakey
Chairman

Enclosures:
(1) List of Loading/Unloading Accident Investigations
(2) List of Safety Recommendations Issued

Enclosure 1

List of Loading/Unloading Accident Investigations

Accident Location	Accident Date	Mode
Berwick, Maine	4/02/1971	Highway
Gadsen, Alabama	8/31/1976	Highway
Baton Rouge, Louisiana	7/30/1983	Railroad
Pascagoula, Mississippi	7/31/1986	Marine
Deer Park, Texas	10/7/1986	Marine
Bay City, Michigan	9/16/1990	Marine
Montgomery County, Maryland	5/12/1993	Highway
Gainesville, Florida	6/17/1994	Highway
Bogalusa, Louisiana	10/23/1995	Railroad
Stock Island, Florida	6/29/1998	Highway
Biloxi, Mississippi	8/9/1998	Highway
Louisville, Kentucky	11/19/1998	Highway
Clymers, Indiana	2/18/1999	Railroad
Whitehall, Michigan	6/4/1999	Highway
Riverview, Michigan [5]	7/14/2001	Railroad

[5] Currently under investigation.

Enclosure 2
Safety Recommendations Issued to
the U.S. Department of Transportation and its Modal Administrations

To U.S. Department of Transportation:

H-71-65:

With the participation of the Department of Labor, and if required, the Interstate Commerce Commission, conduct a comprehensive investigation into the risks associated with the delivery of bulk liquid cargoes from motor carrier vehicles, and initiate the implementation of risk-reduction measures.

H-71-69:

Initiate rulemaking action to amend 49 CFR 394 to require all carriers to report accidents occurring in connection with the delivery of bulk liquid materials from motor carrier vehicles, whether or not the carrier's employees, vehicle, or cargo suffered damages in the accident.

I-88-01:

Establish safety requirements for the movement and temporary storage of hazardous materials at intermodal transportation facilities.

I-88-02:

Strengthen minimum safety requirements for loading and unloading of hazardous materials to provide adequate, uniform safety in all modes of transportation.

To the Research and Special Programs Administration:

H-93-34:

Require that the remote control mechanisms for internal shutoff valves be marked for emergency use on all cargo tanks authorized for the transportation of hazardous materials.

H-99-57:

Promulgate regulations requiring motor carriers that transport hazardous materials in cargo tanks to develop and maintain specific written cargo loading and unloading procedures for their drivers.

I-00-06:

Within 1 year of the issuance of this safety recommendation, complete rulemaking on Docket HM-223 "applicability of the hazardous materials regulations to loading, unloading and storage," to establish, for all modes of transportation, safety requirements for loading and unloading hazardous materials.

R-85-70:

Establish safety standards and inspection procedures for loading facilities at petrochemical plants.

To the Federal Railroad Administration:

R-85-68:

Establish a program to inspect rail loading facilities at petrochemical plants on a regular schedule.

R-85-69:

Develop a memorandum of understanding with the Occupational Safety and Health Administration to define the extent of each agency's responsibility for safety inspections of hazardous materials loading/unloading facilities at petrochemical plants to eliminate gaps or overlaps in responsibility.

To the Federal Highway Administration [Federal Motor Carrier Safety Administration]:

H-99-30:

Add elements to training programs for Federal and State inspectors that include instruction on determining whether motor carriers have adequate written procedures for and driver training in loading and unloading cargo tanks.

H-99-31:

Evaluate the adequacy of cargo-tank loading and unloading procedures of and driver training for hazardous-materials motor carriers and require changes as appropriate.

H-99-32:

Issue an "on guard" bulletin to emphasize the danger of splash filling materials into cargo compartments and of switch loading materials having flash points at or above 100° F (National Fire Protection Association Class II and III liquids) into

compartments that last contained materials having flash points below 100° F (National Fire Protection Association Class I liquid).

H-99-59:

Once the federal regulations requiring motor carriers that transport hazardous materials in cargo tanks to provide written cargo loading and unloading procedures are promulgated, ensure that the motor carriers are in compliance with the regulations.

To the U.S. Coast Guard:

M-87-21:

Establish a safety zone around the wharves of the Chevron Refinery in Bayou Casotte, Mississippi, when there are vessels moored at the facility. Examine the conditions at other facilities that transfer hazardous materials and, where risks are evident, establish similar safety zones to exclude unauthorized persons.

M-91-31:

Amend 33 CFR Part 154, Oil Pollution Prevention Regulations for Marine Oil Transfer Facilities, to require that the Facility Operating Manual include procedures for stopping the transfer of product between a vessel and the terminal when a danger of surging exists from passing vessels.

M-91-32:

Direct the captain-of-the-port of Detroit to instruct the officer-in-charge of Coast Guard Station Saginaw River to notify in a timely manner area marine bulk oil/hazardous material terminals in the Bay City/Saginaw Port area within Coast Guard jurisdiction of impending river traffic so that personnel at the terminals and aboard moored vessels can take appropriate measures to suspend the transfer operations, thereby enhancing safety.

M-91-36:

Disseminate the information contained in this accident report to the marine industry by means of Coast Guard publications and notices, emphasizing the requirements of 33 CFR Part 164.